

REMARKS

Claims 1-12 were pending in the application prior to this Amendment.

The Examiner allows claims 9, 11, and 12 if the Applicants rewrite them to overcome the Examiner's objections. The Examiner rejects claims 1-8 under § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the applicant regards as the invention. The Examiner rejects claims 1-3 and 8 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application No. 2002/0075067 to Kondo et al. The Examiner rejects claims 1, 2, 7 and 8 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,831,472 to Wang et al. The Examiner rejects claim 10 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application No. 2002/0075067 to Eto et al. The Examiner rejects claims 4-6 under 35 U.S.C. 103(a) as being unpatentable over Wang in view of U.S. Patent No. 4,633,192 to Anami.

The applicants amend claims 1-4, 6-7, and 9-12 and add claims 13-15.

Claims 1-15 remain in the application.

The applicants add no new matter and request reconsideration.

Claims Allowable

The applicants thank Examiner Nguyen for indicating allowable claims 9, 11, and 12.

The applicants amend claim 9 to overcome the informalities cited by the Examiner.

The applicants rewrite claims 11 and 12 in independent form including all the limitations of the base claim. And the applicants amend claims 11 and 12 to overcome the informalities cited by the Examiner.

Claims 9, 11, and 12 are allowable.

Specification Amendments

The applicants amend the specification to correct a typographical error.

Claim Rejections Under § 112

The applicants amend claims 1, 4, 6, and 7 to overcome the Examiner's rejections.

Claim Rejections – 35 USC § 102

The Examiner rejected claims 1-3 and 8 under 102(b) as being anticipated by Kondo. The applicants respectfully disagree and traverse the Examiner's rejection.

Claim 1 as amended recites a drive circuit to change the output voltage responsive to the third and fourth reference voltages, the drive circuit having a first and second node, the third reference voltage connected to the first node and the fourth reference voltage connected to the second node. The Examiner alleges Kondo shows in its Figure 4, the third reference voltage VC, the fourth reference voltage at the junction of R4A and R41, and the amplifier AMP3 as responsive to both VC and the voltage at the junction of R4A and R41. See Office Action, p. 4, section 6.

Claim 1 requires the third and fourth reference voltages to be connected to first and second nodes, respectively. Kondo shows no such connection between reference voltages and associated nodes. Voltage VC and the junction of R4A and R41 are connected to a single node, the “-“ node of the amplifier AMP3. Kondo does not disclose a drive circuit with a first and a second node connected to a third and a fourth reference voltage respectively. Kondo, therefore, does not anticipate claim 1.

The applicants respectfully request the Examiner withdraw the rejection of claims 1-3 and 8 under 102(b) as anticipated by Kondo.

The Examiner rejected claims 1, 2, 7 and 8 under 102(b) as being anticipated by Wang. The applicants respectfully disagree and traverse the Examiner’s rejection.

Claim 1 as amended recites a differential amplification drive circuit to generate an output voltage responsive to the first and second reference voltages and the output voltage. The Examiner alleges Wang elements 82, 84, 106, 114, 105, and 112 represent a differential amplification drive circuit and element 102 represents the output voltage. See Office Action, p. 4, section 7.

But in Wang, elements 82 and 84 are comparators (Wang, col. 9, lines 61-65) and elements 106, 114, 105, and 112 are transistors. Wang, col. 10, lines 52-65.

Claim 1 requires that the differential amplification drive circuit is responsive to the output voltage. Assuming that elements 82, 84, 106, 114, 105, and 112 of Wang are the differential amplification drive circuit and element 102 is the output voltage as the Examiner alleges, none of the elements 82, 84, 106, 114, 105, and 112 is responsive to element 102. Hence, Wang does not teach the recited element and cannot not anticipate claim 1.

The applicants respectfully request the Examiner withdraw the rejection of claims 1, 2, and 7-8 under 102(b) as anticipated by Wang.

The Examiner rejected claim 10 under 102(b) as being anticipated by Eto. The applicants respectfully disagree and traverse the Examiner’s rejection

Claim 10 as amended recites a first and second differential amplifier, each directly connected to an output terminal. The Examiner alleges element 40a of Figure 10 and 11 discloses the recited first differential amplifier and element 40b also of Figure 10 and 11 discloses the recited second differential amplifier. The Examiner points out that “the first and second differential amplifiers connected [are] to the output terminal (N22) by way of resistor 4b.” See Office Action, p. 5, section 8.

However, claim 10 requires that the first and second differential amplifiers be directly connected to the output terminal. In Eto, elements 40a and 40b are connected through resistor 4b, not connected directly, to the output terminal.

The applicants respectfully request the Examiner withdraw the rejection of claim 10 under 102(b) as anticipated by Eto.

Claim Rejections – 35 USC § 103

The Examiner rejects claims 4-6 under 103(a) as obvious over Wang in view of Anami. The applicants respectfully disagree and traverse the Examiner’s rejection.

As we discuss above, Wang does not anticipate claim 1 because Wang does not teach a differential amplification drive circuit responsive to the output voltage as recited in claim 1. Anami discloses an amplifier. See Anami, node 9 of Figure 2, node 19 of Figure 4, col. 1, lines 20-21, and col. 2, lines 53-54. The addition of Anami does not make any differential amplification drive circuit in Wang responsive to the output voltage as recited in claim 1.

The applicants respectfully request the Examiner withdraw the rejection of claims 4-6 under 103(a) as obvious over Wang in view of Anami.

Conclusion

For the foregoing reasons, reconsideration and allowance of claims 1-15 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Customer No. 20575

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



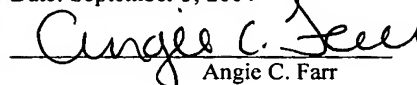
Hosoon Lee

Limited Recognition Under 37 CFR § 10.9(b)

MARGER JOHNSON & McCOLLOM, P.C.
1030 SW Morrison Street
Portland, OR 97205
(503) 222-3613

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

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Angie C. Farr